

Patent Abstracts of Japan

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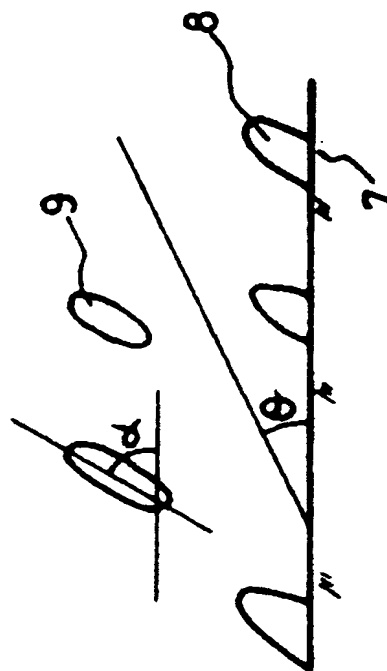
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TITLE : COLOR LIQUID CRYSTAL DISPLAY
DEVICE



ABSTRACT : PURPOSE: To enhance the moisture resistance, reliability and endurance and increase the mass-productivity by diagonally vapor-depositing an inorg. substance on the surface of a glass substrate at a specified angle and filling a liq. crystal having a terminal $\leq 3C$ alkoxyl group and a dichromatic dye.

CONSTITUTION: A liq. crystal composition prepared by dissolving a guest (dichromatic dye) in a liq. crystal (host) is injected into the space between two transparent glass substrates to manufacture a color liq. crystal display device. At this time, inorg. substance such as SiO_2 is diagonally vapor-deposited once on the surface of substrate 7 at $0-45^\circ$ angle θ to substrate 7, and the liq. crystal has a terminal $\leq 3C$ alkoxyl group and is contained in the liq. crystal composition by $\geq 10\%$. Thus, each liq. crystal molecule 9 has orienting angle α near a right angle to give superior visual recognizability. In addition, since the orienting film is inorg., sealing can be carried out with glass frit, and this device has enhanced heat resistance, moisture resistance and endurance.

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